XV. Observations on some South-African Butterflies enumerated in the "Catalogue of Diurnal Lepidoptera of the Family Satyridæ in the Collection of the British Museum. By Arthur Gardiner Butler, F.L.S., F.Z.S., &c., London; 1868." By Roland Trimen.

[Read 2nd November, 1868.]

Having received, through the liberality of the Trustees, a copy of the British Museum Catalogue of Satyridae lately published, I wish to offer a few remarks respecting some of the South-African species included in that volume.

My remarks relate to the genera-

Leptoneura, Pseudonympha, Neope, Mycalesis, and Yphthima.

LEPTONEURA CASSINA, Butler, sp. nov.

(Cat. Satyr. p. 72, pl. ii. fig. 12.)

Closely allied as this form is to the typical Cassus, Linn., I am disposed to think that Mr. Butler is right in treating it as distinct. It appears, as far as I have been able to observe, to frequent quite a different locality from that inhabited by the type-form, and never to mix with the latter. I have described the form now named Cassina in the following terms (Rhop. Afr. Aust., ii. p. 196):— "Specimens found on the sandy flats are invariably much smaller and darker than those inhabiting the hills, the markings of some males being all but obliterated, so that the surface is almost unicolorous. The ochreous colouring of the underside, too, is wanting in the lowland examples, being represented by irregular grayish scaling, conspicuous on the dark ground."

Pseudonympha Sabacus. (p. 93).

Erebia Sabacus, Trimen, Rhop. Afr. Aust., ii. p. 200, pl. 4, f. 1.

Pseudonympha Trimenii, Butler, sp. nov. (p. 94).

Erebia Sabacus, var. A, Trimen, lib. cit., p. 201, pl. 4, f. 2.

Mr. Butler, after stating his inability to regard these two forms as one species, observes (p. 93):—"The position of the ocelli is quite different in the white-veined form," [i. e. Trimenii]; "and the central strigge, which appear to constitute the most constant character in the present family, are different in outline." These remarks apply to the under-surface of the hind-wings, and are correct as regards the central transverse streak, which seems always to be much less angulated than in the type Sabacus; but I find the number, rather than the "position" of the ocelli different,—the form Trimenii constantly presenting six, instead of the smaller number (never exceeding five) found in Sabacus proper.

As noted in my work (ii. pp. 201, and 202 foot-note), Sabacus is a very variable and widely-spread species, especially as regards the clouding and occili of the underside of the hind-wings, some examples from the Eastern parts of South Africa having white nervures without the other peculiarities of the form Trimenii;* and I was therefore inclined to regard the solitary specimen of the latter figured in my book, as an unusual variety or aberration rather than a distinct species. Since that example was figured, however, I have met with the same form, not uncommonly, in three distinct

^{*} I have just seen (Sept. 18th) two specimens, lately added to the collection of the South African Museum, which were taken by Mr. J. H. Bowker (I believe in British Kaffraria), and which form a further link between the form Trimenii and Sabacus proper. These examples present distinctly whitish veining as in Trimenii, and the central streak is strongly marked and angulated, while the ocelli are reduced to six black spots, without pupils or external rings; and on the underside of the fore-wings the red is paler and wider, and (as in Sabacus proper) the crossing streak from costa is all but obliterated. On the upperside, the ocellus of fore-wing is enlarged, and the basal portion of the red field almost obsolete; while the red of the hind-wings is enlarged, and the six ocelli unusually apparent. Both examples are larger than the ordinary Trimenii, and all the markings are singularly dark and suffused, the pupils of the forewing ocellus being bluish.

localities, two being at a considerable elevation, while the third was probably not 200 feet above the sea-level. On the mountains, there appeared to be no examples of the type Sabacus in the vicinity, but in the lowland station the latter was literally swarming, a small proportion only being of the form Trimenii, and those flying among the crowd, and not to be distinguished on the wing. The latter instance rather shook my growing belief in the distinctness of "Var. A" as a species; but I hope to have further opportunities of investigating the question.

Neope dendrophilus. (p. 113).

Debis dendrophilus, Trimen, Rhop. Afr. Aust. ii. p. 191, pl. 3, f. 8.

Mr. Butler observes, "I have seen specimens of this species in Mr. Hewitson's Collection. It evidently belongs to the genus Neope." On referring to Mr. Butler's definition of this genus ("Ann. and Mag. Nat. Hist." March, 1867), I find him stating as follows, viz.:—"The species composing this genus seem very closely allied to some of the species of Debis; and I almost question the propriety of separating them from that genus." If Neope Moorei, Butler, a figure of which accompanies the paper in question (pl. iv, f. 7) be a fair representative of the new genus, it is certainly doubtful whether dendrophilus can be regarded as a true congener of that species, for my insect has considerably shorter antennæ, much blunter fore-wings (rather truncate than apically produced), and hind-wings less prolonged in their lower portion.

During the early part of the year 1867, I discovered, in the Colony of Natal, a very beautiful and striking variety of Dendrophilus, in which all the spots of the forewings are enlarged and pure white, instead of those of the outer row only being whitish and those of the inner ochreous. This form was numerous in elevated woods at Tunjumbili, overlooking the Tugela valley. Specimens

are in Mr. Hewitson's collection.

Mycalesis Eusirus. (p. 128).

Mycalesis Eusirus, Hopffer, Monatsberichte d. Königl. Akad. d. Wissensch. zu Berlin, 1855, p. 641.

Mycalesis Evenus, (p. 129).

Mycalesis Evenus, Hopffer, loc. cit.

Mycalesis Caffra. (p. 129).

Mycalesis Caffra, Wallengren, Lep. Rhop. Caffr., p. 34, n. 2 (\mathfrak{P}).

In my work on South African Butterflies, I have given these three, together with Mycalesis Gambius, Doubleday, and M. injusta, Wallengren, as one species, regarding Eusirus and Caffra as specifically identical with Evenus. Under M. Eusirus, Mr. Butler writes thus (p. 129):—"Mr. Trimen, having received a single specimen of the variety injusta, has considered himself fully justified in sinking the species Eusirus, which he places as a synonym of the more recent Evenus; injusta does not, however, link these species, nor do any connecting forms appear to exist." As I think this gives an incorrect idea of what I have published, I proceed to transcribe the passage (Rhop. Afr. Aust., ii. p. 208):—"There can be no doubt that Hopffer's Eusirus is nothing more than a strongly-marked example of the & Evenus. Such was my decided impression on merely comparing the excellent figures in Peters' "Reise;" and a specimen of the variety since received from Kaffraria entirely confirms it. Variability in the size and number of the ocelli is a character common to the greater part of the Satyridae, and Mycalesis is no exception to the rule. In the specimen referred to, there is a further very minute ocellus close to the termination of the pale streak. Wallengren's M. injusta appears to be this variety, especially as he notes its resemblance to Cramer's Justina, to which it certainly seems very nearly allied. Cramer's figure, however, gives two ziczac lines beneath, between ocelli and the line parallel to hind-margin, and depicts no striæ in discoidal cell. He states the species to inhabit Coronandel. M. Caffra, Wlgr., is very clearly a pale ? of Evenus, only varying as regards the number and distinctness of the ocelli."

I would here observe (1) that, in my second sentence above quoted, the words "the variety" mean Eusirus (not injusta)—the form just before referred to as, in my opinion, "a strongly-marked example of the & Evenus,"—and that I subsequently remark that "M. injusta appears to be this variety"—i.e. the same variety as Eusirus, of which I had received a Kaffrarian example;—(2) that Evenus can scarcely with justice be termed a "more recent" species than Eusirus, seeing that both forms were originally described together, by Hopffer, on the same page of the Journal above mentioned; and (3) that I never expressed the opinion that Wallengren's injusta "linked" Evenus and Eusirus, but that it was the same as, or synonymous with, the latter.

Mr. Butler, however, gives (p. 129) M. injusta as a "Var. 3" of M. Evenus, a view in which I quite concur, the only difference on this point being that I go rather further, and, from a comparison of Wallengren's and Hopffer's descriptions with the latter's figures, hold injusta and Eusirus as in all probability one and the same

form.

I would only further remark that, whereas Wallengren distinctly indicates (Lep. Rhop. Caffr. p. 34) that his Mycalesis Caffra is of the "?" sex, Mr. Butler quotes him for the 3, at the same time giving M. Gambius,

Doubl., as the 2 of Caffra.

Without professing to define the limits of species in so perplexing a genus as *Mycalesis*, I may be permitted to express the conviction, founded on the examination of numerous specimens, and on personal acquaintance with the living insects in various stations, that it will be found impossible to separate, as species distinct from each other, any of the South African forms above mentioned.

YPHTHIMA LISANDRA (Var. Lara). (p. 150).

Papilio Lara, Donovan, Nat. Repos., ii. pl. 71.

Ypthima laroides, Westw., in Gen. Di. Lep. p. 395.

I only refer to this species in order to point out that there is no ground whatever for considering it as a native of South Africa, as Donovan only gives the locality "Cape of Good Hope," under the mistaken impression that his insect is the *Lara* of Linneus. Donovan quotes

the description in "Museum Ludovicæ Ulricæ, &c." (p. 320), which is that of a Lycenide, common in South Africa, but of somewhat uncertain relations; Doubleday referring it doubtfully to Zeritis, and Wallengren giving it as an Aphneus, while I have placed it in Chrysophanus. It is stated by Donovan that his figures were copied from Jones's drawings, and that the latter were made from an example in the Linnean Cabinet,—"the individual specimen described by Linnæus;" but it is beyond doubt that Linné's detailed diagnosis applies strictly, both as regards size and markings, to the Lycanide, and not at all to Donovan's Satyride. In illustration of this, I need only mention two very obvious discrepancies, viz.: (1) while Linne's species is described as having the single ocellus in the fore-wings "ad angulum posticum," Donovan's figures represent it near the apex; and (2) that the "ocellus nullus" of the underside of the hind-wings is quite opposed to Donovan's illustration, which delineates six distinct ocelli.